



Herodotus and the Caspian

Author(s): Stanley Casson

Reviewed work(s):

Source: *The Annual of the British School at Athens*, Vol. 23 (1918/1919), pp. 175-193

Published by: [British School at Athens](#)

Stable URL: <http://www.jstor.org/stable/30096860>

Accessed: 10/03/2013 00:14

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at
<http://www.jstor.org/page/info/about/policies/terms.jsp>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



British School at Athens is collaborating with JSTOR to digitize, preserve and extend access to *The Annual of the British School at Athens*.

<http://www.jstor.org>

HERODOTUS AND THE CASPIAN.

(PLATE XVI.)

§ I.—GENERAL TOPOGRAPHICAL PROBLEMS.

FROM several passages in Herodotus it is possible to piece together a general description of the Caspian Sea which, apart from its claims to accuracy, is at least comprehensive when judged by the standards of Herodotean geography.¹ The Caspian, says the historian, is a sea by itself without connexion with other seas. Its length is fifteen days' journey in a rowing boat, and its breadth at the broadest part is eight days' journey. Its western shores are bounded by the Caucasus and its eastern shores by vast deserts. Its southern shores form the boundary of Asia in the North.

The further passage² which gives a lucid description of the geological processes by which inland lakes and seas are formed in the Middle-east, belongs properly to any detailed account of the Caspian region, and is, in fact, attributed by Herodotus to a district 'on the confines of the Chorasmians, Hyrcanians, Parthians, Sarangians and Thamanians' which must, in consequence, be to the South-east or East of the Caspian.

It remains to be seen what knowledge, if any, Herodotus had of the northern shores of the Caspian beyond the fact that they closed it in and prevented any junction with the Northern Ocean, a belief which grew up at a later date.³ It is the purpose of this paper to show that Herodotus

¹ i. 203-4 (Dimensions and eastern and western shores). iv. 40 (southern shore).

² iii. 117 (the river Akes and the landlocked sea). The fact that the preceding chapter deals with the Arimaspi, who are located East of the Caspian (*v. inf.* p. 191) at any rate helps to orientate this story.

³ See Tarn, *J.H.S.* xxi. pp. 18-19.

does give certain information concerning the lands which form the immediate northern and north-eastern confines of the Caspian and that this information necessitates a modification of previously accepted groupings of Scythian tribes.

From the general nature of the account of the Caspian given in Herodotus it seems probable that the sources he drew from were those of traders and sailors who actually used the main trade routes. This seems particularly evident from the detailed dimensions that he gives and from the practical and authentic notes that he records,¹ which differ as much from the vague and rather unduly schematic account given by Aristeas of tribes situated North and East of the Caspian,² as a road book differs from a traveller's general report based only on his own personal experiences.³

The main geological problems of the Caspian area must first be dealt with in reference to the information given by Herodotus. These problems, in so far as they concern history, are two in number. The estimate here given of them must affect our opinion of historical records of the Caspian, and the solution tentatively put forward may help to clear up much that is confused.

The problems are, in the main :—

- (i) Did the Caspian in historical times differ in its physical outline and characteristics from the Caspian of to-day? ⁴
- (ii) Did the river Oxus at any time debouch into the Caspian or in any way change its course in historical times?

The historical corollaries to these problems are as follows :—

- (i) Why is the Sea of Aral (the fourth largest inland sea) never mentioned by name or otherwise in historical records until the eighteenth century of our era, and is not indisputably shown on maps until then?
- (ii) What was the course of the Oxus in the time of Herodotus, and what changes has it undergone subsequently?

¹ Particularly in i. 204.

² iv. 13.

³ Herodotus himself in iv. 24 tells us that Scythians and Greek traders from the Black Sea are his sources.

⁴ For convenience the various names of Aral and the Oxus are here given, viz. Oxus = Amu Daria, Jihun, and Viadme (Gonzales de Clavijo); Aral = Lake Kitchai or Kithay and Khwarizm. For the identity of the Oxus and Araxes, see below p. 190.

These problems with their corollaries will be taken in order.

(i) Herodotus in the description above quoted makes the Caspian of greater length than breadth and states in definite and precise language that it is an inland sea. In this he is followed by Ptolemy, while Strabo, Mela, Pliny and Plutarch believe it to have been connected with the Northern Ocean. It is tempting to assume that Herodotus, therefore imagined the Caspian to be much as it is to-day, *i.e.* of greatest length from North to South.¹ He makes, however, no attempt to orientate his plan of the Caspian and, in consequence, it is quite impossible from his description alone to assume that it was in his day of the same shape as it is now. In this respect it is interesting to refer to the evidence of some early extant maps of the sea.

The famous Genoese map of the world, published in 1447,² makes the Caspian larger than the Euxine and broader from East to West than from North to South. The same peculiarity is seen in Fra Mauro's³ map of the world, though with the Caspian on a smaller scale, in Diego Homem's⁴ map of the world, and again in the map of Asia published in 1667.⁵ Only in 1723 is the sea represented in its true proportions.⁶ The inference from this evidence is that most of the mediaeval cartographers derived their idea of the sea from a pattern generally accepted since the days of Ptolemy who, in turn, may have accepted it from Herodotus. Whether this accepted outline really represented the views of Herodotus depends on the geological history of the sea from his time.

Before reviewing the geological changes that have taken place in those regions in historical times, a study of the pre-historic geological changes is worth consideration.

The generally accepted geological view,⁷ first foreshadowed in the seventeenth century by Tournefort, is, that at a date anterior to the opening of the Bosphorus, the Euxine and Caspian were united north of the Caucasus range by a channel that ran approximately along the line of the Manitch lakes across what are now the rich alluvial plains of Stavropol and Kuban,

¹ This is done by Minns: *Greeks and Scythians*, p. 10.

² 'Cosmographorum descriptio cum Marino accordata,' reproduced in Sven Hedin's *Southern Tibet*, vol. i. Pl. XII.

³ Sven Hedin, *op. cit.* Pl. XIII. This map is dated at 1459.

⁴ Sven Hedin, *op. cit.* Pl. XIX.

⁵ In Kircher's *China illustrata*: reproduced by Sven Hedin, *op. cit.* Pl. XI.

⁶ Delisle's map, Sven Hedin, *op. cit.* Pl. XLII.

⁷ Summarised by Wood, *The Shores of Lake Aral* (1876), chap. x.

to the Sea of Azov. Lake Aral and the network of smaller lakes to the north of it together with the vast alluvial plains of Western Turkestan (the Karakum sands and other districts) would thus have formed the eastern half of this Asiatic Mediterranean, which is estimated to have had a surface some 220 feet above the present sea level.

At the opening of the Bosphorus¹ a large volume of water entered the European Mediterranean, thus reducing the level of the Asiatic Mediterranean and isolating the eastern portion, dividing it by the Caucasus.² The occurrence in both regions of the same flora and fauna confirms the geological views.

In the time of Herodotus the isolation of the eastern portion was, of course, complete, but further local physical conditions came into operation in regard to the eastern half of this eastern portion and produced an Aralo-Caspian sea in which the Aral and the Caspian do not appear to have been definitely severed. What these local conditions were is best described in the account given by Herodotus of the way in which the river Akes could be made to form a lake; in other words the Aral was prevented from drying up and was kept joined to the Caspian by the continuous flow into it of large rivers.³

The fact that the mean depth of the Aral at the present day is only 50 feet and that the rivers feeding it have been notoriously subject to variations and divergencies, shows that the conditions governing the two waters can never be said to be permanent. Prince Kropotkin,⁴ whose opinion is based upon research in those regions, believes it to have been possible that the sea of Aral communicated in historical times with the Mortvyi Kulduk Gulf of the Caspian via lakes Chumyshty and Asmantai and the Ust Urt plateau, and that this communication was in existence

¹ This was, of course, effected by a gradual process of erosion along a line of least resistance and not by any sudden catastrophe. See Frazer, *J.R.A.S.* i. xlv. p. 278. The most recent geological pronouncement on the question states: 'the depression of the region, changing the Bosphorus from a river to a strait, is placed in the recent past during the existence of men.' Pumpelly, *Explorations in Turkestan*, 1905, p. 26.

² It is interesting in this respect to note that the project of uniting the Caspian with the Euxine by a canal existed in the time of Seleucus. See Tarn, *loc. cit.*, p. 19.

³ 'As regards the basin of Aral, it is evident that, after the opening of the Bosphorus and its consequent separation from the Caspian, it would have been placed and would have remained in its present state of isolation had not the quantity of water it received from the tributary rivers filled it up to overflowing and so caused its junction in another way with the Caspian.' Wood, *op. cit.* p. 124.

⁴ *Encyclopaedia Britannica* (ed. 1902) ('Lake Aral').

as late as the sixteenth century, leading Antony Jenkinson to confuse the waters of Aral with the Caspian itself.

A further connexion was almost certainly obtained via Lake Sarykamish and the Uzboi channel to the Balkhan Bay, though this line of connexion would more correctly be considered as a river, being the main stream of the Oxus, flowing either through Lake Aral or directly to the Caspian.¹

The existence of this Aralo-Caspian Sea in the time of Herodotus thus suggests that he intended his dimensions to describe a sea that had its greatest length on an axis running North-east and South-west and including Lake Aral. That such a sea existed in his time is the general belief of geologists² at the present day, and seems to be the inference from the silence of history in regard to Lake Aral. It should be remembered, however, that the whole of the eastern side of the Aralo-Caspian sea would be extremely shallow³ and the actual channel of junction of the two seas would have been little more than an immense reed-covered marsh of the type described by Herodotus as in the territory of the Budini, or at the mouth of the Araxes.⁴ Marshes of this nature are characteristic of Central Asia, as, for instance, in the delta of the Amu Daria where tracts several hundred miles in extent of reed-covered marsh-land are periodically inundated by the river. The gradual desiccation (see Fig. 1) of Central Asia led some time in the Middle Ages to the drying up of the marshy channel and to the consequent isolation of the two basins. The actual dating of the final separation of the two basins may probably be assigned to the fifteenth or sixteenth century A.D., and the Lake of Kithay, which is the earliest name of Aral, does not occur until the sixteenth century,⁵ while the name Aral itself is not common until the eighteenth century.⁶ The two waters, however, may

¹ The vexed question as to the course taken by the Oxus is dealt with below.

² It is only fair to state, however, that in the middle of last century the opinion of geologists was not unanimous. Thus Rawlinson (*Proc. R.G.S.* 1867, March) held that the sea of Aral separated off from the Caspian in the Middle Ages, while Murchison (*Journal R.G.S.* 1867) held that both seas had a separate existence in prehistoric times.

³ Quintus Curtius tells us that the Caspian has but little depth on its northern side (vi. 4. 19).

⁴ iv. 109 and i. 202.

⁵ See Sven Hedin, *op. cit.* Pl. XXVI., Pl. XX., p. 183. Gerhard Mercator gives a lake called Kichai, near Tashkent. See also Wood, *op. cit.* p. 143.

⁶ The evidence of cartographers would obviously be insufficient for this dating. It is, however, strengthened by Rawlinson's view (see note 2). Minns accepts this general view as to the existence in historical times of an Aralo-Caspian Sea: *Greeks and Scythians*, p. 10. The name

have remained in a condition of semi-isolation (*i.e.* the marshes between were periodically inundated) for some time previous to the final desiccation ; but it seems clear, that in the first century of the Christian era the Aralo-Caspian Sea was more or less one sea, while the descriptions of the Caspian in Strabo, Pomponius Mela and Pliny suggest in a very marked way that the shape of the Aralo-Caspian Sea was at that time more or less triangular, with the north-eastern corner of Aral and the north-western corner of the Caspian near Astrakhan, forming two corners,

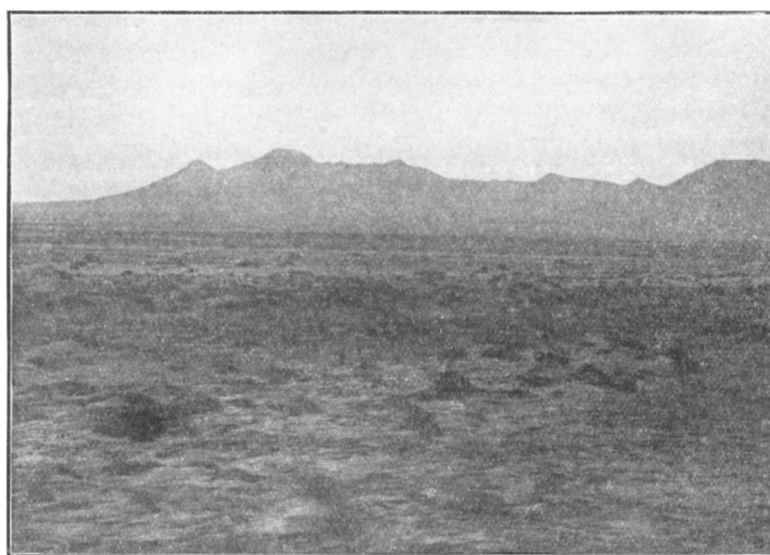


FIG. 1.—HILLS ON THE CASPIAN SHORE NEAR BAKU, SHOWING THE PLAIN
ORIGINALLY COVERED BY THE SEA.

while the south-eastern corner of the Caspian near Chikishlyar formed the southern corner. In the middle, between the Sarykamish and Mortvyi Kulduk channels, the plateau of Ust Urt would resemble an island or perhaps an archipelago.

(ii) The problems connected with the Oxus have already been dealt

Aral occurs on the *Carte Nouvelle de l'Asie Septentrionale*, 1726 (Sven Hedin, *op. cit.* Pl. XLIII.), and is mentioned in the poetical account of his travels by a Greek, Vassili Vatatsis, who visited Turkestan about 1725–1730. (See S. P. Lambros, *Μικταὶ Σελίδες*, p. 596). He claims to have been the first ‘to bring information about Aral to the learned men of Oxford and London.’ I am indebted to Professor Andreades of the National University, Athens, for this reference.

with exhaustively by Mr. Tarn,¹ who states that 'recent investigations appear to have rendered it fairly certain that the Oxus never flowed into our Caspian within any historical period, though it may have sent and probably did send a branch westwards, into the Sarykamish depression, then either a lake or a part of the Aral,' and again, 'we may take it as fairly certain that the Oxus never reached the Caspian by any of the three routes.'²

This view seems to me to depend too much upon an interpretation of the physical peculiarities of the rivers of Central Asia in the light of European physical characteristics, and disregards a large volume of Arabian evidence of the Middle Ages as to actual changes of the Oxus. It further lays too much emphasis on the alternative of flowing either into the Aral or into the Caspian, whereas it seems fairly clear that in the time of Herodotus the two basins were joined, and therefore the Oxus could be said to run into both. The point at issue is whether the actual course of the Oxus ran more or less due North towards the North-eastern apex of the Aralo-Caspian Sea (near its present outlet), or whether it ran South-west to the southern side or apex of the triangular sea, near Balkhan bay or the mouth of the Atrek. In both cases it could be said in antiquity to run 'into the Caspian.' Nevertheless, there is evidence to show that between 500 B.C. and the present day the Oxus has changed its direction from North to South-west and *vice-versa* at least three times.

Whether the Oxus flowed South-west in the time of Herodotus or not is uncertain. Evidence is wanting, and one is hardly justified in the inference from the statement³ that the Caspian and the Araxes (? Oxus) form the southern boundary of the Caspian, that the Oxus entered the southern half of the Aralo-Caspian Sea at this period.⁴ Some time, however, between 500 B.C. and 900 A.D. at least one change took place, and the

¹ *J.H.S.* xxi. pp. 10 and 12.

² *I.e.* (i) the Uzboi channel from Lake Sarykamish; (ii) the Unguz channel, which is 44 m. below the level of the Caspian, across the Karakum sands; (iii) from Charjui along the line now followed by the Central Asiatic Railway *viâ* Merv and Ashkhabad, and with the rivers Tejend and Murghab as tributaries. There are, however, two other possible routes, viz. (iv) from Charjui to Kizil Arvat (as in No. iii) and thence between Kopet Dag and Kuren Dag to the bed of the present river Sumbar and to the sea at Chikishlyar; (v) from Charjui due West across the Karakum sands to the Igdy wells, thus joining up with the Uzboi channel (No. (i) above).

³ *iv.* 40.

⁴ Arrian distinctly says that both the Oxus and the Jaxartes flow into the Caspian (*Anabasis*, iii. 29, 3 and iii. 30, 7). This affords no evidence as to the direction of flow of the Oxus, but is strong proof of the existence of an Aralo-Caspian Sea.

Oxus flowed along a channel which brought it out in Balkhan bay, since Mukadasî (an Arabian writer of the tenth century) relates that in former times the main stream of the Oxus had flowed down to a town in Khurâsân called Balkhân,¹ though in his day it no longer flowed in this direction.

In the year 1220 the Oxus again changed its course, this time owing to a combination of natural and artificial causes. In this year the city of Urgenj (between Sarykamish and the present Oxus) was sacked and destroyed by the Mongols and the river was intentionally diverted, the overflow running South-west into the Uzboi channel, while a small part only continued its course northwards. Yâkût, a contemporary of these events, refers to the Oxus as flowing into the Caspian, while Mustafwî, who lived in the fourteenth century, states that though part of the Oxus drained to the North, the main stream passed Old Urgenj, turned down a passage called the 'Steep of Halam,' presumably a cataract, and flowed thence for a distance of six days march to a place called Khalkhâl, a fishing station on the Caspian. He adds that the Oxus had thus changed its course after the Mongol invasion. Again, in 1405, the Spanish ambassador of Henry III. of Castile to Timur, Ruy Gonzalez de Clavijo,² visited Samarkand and reported (from hearsay) that the Oxus flowed 'into the sea of Bakû' (clearly the southern Caspian), while in 1417, Hâfiz Abû states that the river which had discharged into Khwârizm (Aral) now flowed down 'by Kurbâvû to the Caspian.'

Some time after this date, the Oxus again reverted to its northern course, and in 1558, Antony Jenkinson speaks of it as 'not flowing into the Caspian Sea as it hath done in times past but to Lake Kithay.' This is confirmed by Abu-l-Ghâzî, a native of Urgenj, in 1576. Since this date no subsequent change of course has taken place, and we have evidence

¹ See Le Strange, *Land of the Eastern Caliphate*, p. 455 *et seq.* Mr. Tarn's arguments against the Oxus having flowed to this outlet are based on the geological evidence of the Russian engineer M. Konshin, who examined the Dardji peninsula (the reputed outlet of the Oxus in Balkhan bay) and found no trace of fresh-water deposits or river shells. It should be remembered, however, firstly that this is negative evidence only and in consequence not infallible, and secondly that the bay was almost certainly of greater extent inland, being part of the Aralo-Caspian Sea, so that a search for fresh-water shells would in any case be fruitless. In fact, Mr. Tarn himself says that a rise in the Caspian of only 20·17 metres would take the sea up the Balkhan bay as far as the small lake called Topiatan.

² *Narrative of the Embassy of Ruy Gonzales de Clavijo to the Court of Timur*, published by the Hakluyt Society, p. 118.

confirming the continued northern direction of flow from various travellers.¹ At least three changes of direction, therefore, are recorded,² and it is worthy of note that in 1834³ the floods of the Oxus were so high that the Uzboi channel was filled for some distance and one part, at least, of the process by which the Oxus changes its flow was seen in operation.

In the light of this examination of the main physical problems at issue in the Caspian area it becomes possible to review the information Herodotus gives concerning the tribes who inhabit these regions.

§ 2.—TRIBES IN THE CASPIAN AREA.

In the fourth book⁴ of his histories Herodotus gives a consecutive account of the tribes living in the lands which, he says,⁵ are not properly those of Scythia. These lands lie the other side of the Don and the first territory entered, after crossing the Don, is that of the Sauromatae, commencing at the upper end of Azov and stretching northwards for a distance of fifteen days' journey.

At the outset it should be remembered that the course of the Don from its mouth to Kalatch (its nearest point to the Volga) is in a north-easterly direction. Only above Kalatch can it be said to flow either from the North or the North-west. Information sufficiently detailed to verify this would hardly have been in possession of geographers in the fifth century B.C., and it seems in every way probable that Herodotus thought the Don flowed not only generally from the North, but for the most part from the North-west, since according to his description, after crossing the Don one enters the lands of the Sauromatae which extend to the *North* and next to them come the Budini beyond whom, *πρὸς βορρῇν*, is a desert.

¹ *E.g.* Jonas Hanway in 1743 and Reynolds and Hogg in 1640, quoted by Wood, *op. cit.* p. 224.

² The whole of this evidence can be summarised conveniently as follows :—

<i>Date.</i>	<i>Flow of Oxus.</i>	<i>Authority.</i>
? ? ?	S.W.	Mukadasî
900–1000 A.D.	N.	Mukadasî
1220–1300 A.D.	S.W.	Mustafwî and Yâkût
1405	S.W.	Gonzales de Clavijo
1417	S.W.	Hâfiz Abû
1558	N.	Jenkinson
1576	N.	Abu-l-Ghâzî

³ Wood, *op. cit.* p. 228.

⁴ Ch. 21 *et seq.*

⁵ *Τάναϊν ποταμὸν διαβάντι οὐκέτι Σκυθική.*

In other words, at the beginning of his description of Scythia beyond the Don, he sets his map wrongly and takes his readers in a direction that lies North or North-west. To anyone crossing the Don between its mouth and Kalatch (and it is most improbable that Herodotus referred to the upper reaches of the river) the natural direction can only be East or South-east if the traveller wishes to go straight ahead without recrossing the river. Some inkling of this false setting of the map seems to have found its way into his narrative when he repeatedly modifies the northwards tendency by trying to reset his map so as to take the traveller more to the East. Thus beyond the desert to the North of the Budini one finds the Thyssagetae a little to the East: *μετὰ δὲ τὴν ἔρημον ἀποκλίνοντι μᾶλλον πρὸς ἀπηλιώτην ἄνεμον*.¹ Beyond the Thyssagetae and Iyrcae, again, a little further round to the East still, dwells another tribe: *ὑπὲρ δὲ τούτων τὸ πρὸς τὴν ἡῶ ἀποκλίνοντι οἰκέουσι Σκύθαι ἄλλοι*. Herodotus has thus almost neutralised the original fault of direction caused by his erroneous idea of the lie of the Don, and has succeeded in bringing his traveller on to a route running almost due East.

The Sauromatae can thus be placed fairly accurately in the lands of the Don Cossacks and the habitable parts of the prairies of Astrakhan,² where commentators on Herodotus have invariably placed them.

With the Budini, however, we are at once involved in difficulties. The tribe is reached by following a route which, according to Herodotus, follows a northerly course and sweeps round in a curve towards the East. Thus the Budini, one supposes, would lie somewhere near the Volga in the region of Tsaritsyn or even higher. Minns³ places them, in this way, in the neighbourhood of Kazan, while according to another scholar⁴ they are near Saratov. Macan put them on the upper waters of a Don which runs due North and South.⁵

Such identifications as the above leave out of account the initial error of direction made by Herodotus in his alignment of the Don, and are based only on the partial correction by Herodotus of his own faulty orientation. Herodotus thought the Don ran from the North-west, whereas

¹ Ch. 22.

² It is unlikely that much of the province was ever inhabited to any extent, as between the Volga and the northern boundary of the Stavropol province it is for the most part, except in the coastal region, a salt and unfertile plain.

³ *Op. cit.* p. 104.

⁴ Westberg, quoted by Minns, *op. cit.* p. 113 (note).

⁵ Vol. ii. p. 32, Map II.

that part of it which concerns his geography runs from the North-east. If he corrects his orientation of what lies across the Don sufficiently to make his traveller into extra-Scythia move more approximately due East there still remains a margin of error uncorrected, which, when corrected, would bring the traveller into a direction running either South-east or East-south-east.

The Budini, therefore, with the alien city of Gelonus in their midst, must be looked for somewhere North of the Caucasus range and South of the lower reaches¹ of the Volga. Their physical characteristics (*γλαυκὸν τε πᾶν ἰσχυρῶς ἔστι καὶ πυρρὸν*) are not unsuited to this area which is to-day inhabited by tribes of much the same physical characteristics. Herodotus himself, however, gives what may be a clue to their whereabouts. This land of the Budini, he says, is bordered on the North by a desert seven days' journey in extent, with the Thyssagetae slightly to the East of it.² In the woodiest part of their territory is a broad deep lake³ with marshes and reeds on its banks. Here otters and beavers are caught *καὶ ἄλλα θηρία τετραγωνοπρόσωπα*. The skins of these square-faced animals are used for the lining of coats.

On the assumption, based on preceding arguments, that this tribe can be placed somewhere near the province of Astrakhan, the immense marshes on the shores of the Caspian between Astrakhan and Kizilyar at once suggest themselves as identical with the marshy lake Herodotus describes. The 'other square-faced animals' are obviously seals, which are common in the North Caspian; in fact the seal fisheries still form (or did until 1914) a large and active industry.⁴ The 'lake' thus becomes the Caspian, which is not mentioned by name in the description of extra-Scythia. This omission is explained in conformity with the preceding arguments, according to which Herodotus himself was driven by his false orientation to place the Budini inland to the North, thus being compelled to bring into line his information concerning them. He must have been still further confused by the fact that in lakes such as Lake Manitch (which

¹ *I.e.* the Volga between Tsaritsyn and Astrakhan.

² iv. 22.

³ iv. 109.

⁴ A collection of implements used in this industry and of photographs is in the museum at Askhabad in Transcaspia. The North Caspian is usually frozen up until April, and the Volga is only open in May. For the suggestion that Herodotus here refers to the seal fisheries, see Wood, *op. cit.* p. 131. A remarkable parallel to this passage occurs in the works of the seventeenth century Turkish traveller Evliya Effendi. Referring to the shores of the Caspian, he says, 'the shore is covered with bones and carcasses of strange kinds *with square and pentagonal heads*.' *Travels* (Ed. von Hammer, 1850, ii. p. 164).

is clearly within the confines of the Budini) otters and beavers were probably caught, and that Gelonus is almost certainly an inland stronghold. It is, of course, impossible to verify the site of Gelonus itself; had it been on the site of Astrakhan it seems impossible that the Volga would not have been mentioned. A more likely site is, perhaps, the ancient and little-known ruined city of Madzhar, on the river Kuma just inside the northern boundaries of Stavropol province, and near the village of Burgonmadjari. This place (visited and described by Klaproth¹) was clearly a large and important city in the Middle Ages and may well have been on the site of Gelonus. In any case the Greek characteristics of Gelonus, as described by Herodotus, suggest that it was more or less within reach of Greek trade centres,² and Madzhar actually lies on the eastern line of communications from the Cimmerian Bosphorus right across North Caucasia by way of the Kuban and Kuma rivers to the Caspian.

The result of this analysis of the account of the Budini suggests at once that the historian has unknowingly given us a description, meagre it is true, but accurate as far as it goes, of the northern end of the Caspian, thus filling, to a certain extent, the missing gap in his account of that sea.

With this *point d'appui* to start from, it will be interesting to see how the other extra-Scythian tribes can be fitted into a revised orientation of Herodotus's map.

To the North of the Budini, he says, is a desert of seven days' journey in breadth. For North, according to the revised orientation, we should understand a direction North-east or very nearly East. This would bring us to the head of the Caspian, the desert in question corresponding fairly closely with the entirely desolate area between Astrakhan and Guriev. Here the second 'turn to the East' indicated in the text of Herodotus brings us well round the north end of the Caspian to the Thyssagetae, a tribe of nomad hunters who occupied the land now peopled by the Little Horde of the Kirghiz. Adjoining them is a similar tribe, the Iyrcae. The fact that the country is said to be well wooded

¹ *Travels in Caucasus and Georgia* (English translation by Shober, 1814), p. 224.

² Minns (p. 104) puts Gelonus at Kazan, which seems too far to be under Greek influence in so marked a way as Herodotus describes. Wood (*op. cit.* p. 131) suggests Urgenj, but this is equivalent to placing the Budini in the territory of the Massagetae, and is, in any case, on the wrong side of the Caspian.

suggests that these tribes lived well away from the Caspian in the direction of Uralsk.

A further 'turn to the East,' this time bringing the traveller almost East-south-east and 'beyond' the Iyrcae, we meet a Scythian enclave, by race Royal Scyths. These people, we must assume, lived well North of what is now the Ust Urt plateau and along the northern shores of the Aralo-Caspian Sea.

From the territory of these Royal Scyths onwards, says Herodotus, one leaves what are comparatively fertile lands and enters upon a region that is stony and rugged. After passing a great extent of this rough country one reaches the land of the Argippaei. Here all trace of direction is admittedly lost and we might be going North-east, South-east, or even South. Hitherto we have had mapped out for us a journey from Azov to the north end of the Aralo-Caspian Sea. We are at this point cut adrift as regards direction and can only conjecture.

The only district that is trackless waste in comparison with other districts in the Caspian region is the vast stretch of desert South-east and South of Aral, the Kizilkum and Karakum sands, the lands where Timur and Ghengis Khan rose to power. Herodotus has admittedly only isolated scraps of information and no geography worthy the name to give about the tribes in this area. Probably his information is derived almost entirely from traders' tales.¹ That he knew of part of this great desert system is obvious from his description of the East side of the Caspian which, he says, *πεδίου ἐκδέκεται πλῆθος ἄπειρον ἐς ἄποψιν*.² (See Fig. 4.) He further places the Massagetae somewhere in these plains.

After the enclave of the Royal Scyths, then, comes an unknown extent of desert with the Argippaei dwelling at the other end of it at the foot of lofty mountains. The tendency has been on the part of some commentators to continue South-east to the Altai mountains, finding in them the mountains referred to and placing the Argippaei at their foot. This may well be so, but it seems that perhaps too much ground is being covered and one is entering regions too distant for the passage even of travellers' tales. Other critics favour the main range of the Urals, but this, apart from the direction, seems to cover too little ground for the

¹ That he is dependent on traders for most of his information about the tribes between the Don and the Argippaei is clear from i. 24, where he tabulates his authorities as (a) Scythians, (b) Greeks from the Borysthene, (c) Greeks from other Euxine towns.

² i. 204.

description. However this may be, it is as well to look nearer the last recorded geographical features, since Herodotus, at least as far as the land of the Argippaei, is avowedly giving a *continuous* account,¹ which would read coherently to one taking a journey through the lands in question. He even implies quite unambiguously, that the journey was regularly made by Scythians, who used seven interpreters before reaching the Argippaei.

If we look nearer into the regions already described by Herodotus we find that across the great desert of Western Turkestan is a very prominent and clearly marked mountain range forming the southern boundary of the desert of Karakum. This is the Kopet Dag range which forms the northern boundary of modern Persia and continues to the East along the northern frontier of Afghanistan. Along the foot of this range, from the Caspian to the Oxus, dwell the bulk of the Turkoman tribes. These tribes are for the most part nomadic, although a large proportion became sedentary under Russian imperial rule, which encouraged corn and cotton growing.²

Now the most important distinguishing features of the Argippaei in the description of Herodotus are as follows:—

(a) *Appearance.* They are bald and have flat noses and long chins.

(b) *Habits.* They eat fruit, and in particular prepare a drink made of the juice of fruit mixed with milk and called in their language ἄσχυ. They live in huts made of wood and felt.

All these characteristics, it is true, might apply equally well to any of the Turkic tribes in Central and Western Turkestan. The general geographical description, however, and the absence of flocks and good pasture-lands which Herodotus particularly notes,³ strengthens the attribution of these racial characteristics to the lands of the Turkomans. A further point, which has already in part been noted by Minns,⁴ is that the name of the drink ἄσχυ strongly resembles the Turkish word *Ekshi* meaning 'sour' or another Turkish word *Aji* meaning 'bitter.' The modern Turkoman has enough Mongol blood in him to make the type approximate quite well with the flat-nosed, long-chinned type of Argippaeian and it is remarkable that the modern Turkoman, if not bald from birth, is at any rate shaved

¹ iv. 24. μέχρι μὲν νυν τῶν φαλακρῶν τούτων πολλὴ περιφάνεια τῆς χάρις ἐστὶ καὶ τῶν ἐμπροσθε ἐθνέων.

² Their nomadic habits have been largely revived during the last two years owing to the insecurity caused by recent political upheavals in the province.

³ iv. 23. ⁴ *Op. cit.* p. 109.

bald in order to wear the skull cap which is part of the sheepskin headdress universally worn.

It is obvious, however, that any identification of the Argippaei with the Turkomans presupposes the presence in the same area in the fifth century B.C. of a Turkic type; and history can by no means substantiate this assumption. It is not unreasonable to assume, however, that the Turkoman of Karakum may have adopted habits and customs of his predecessors in those regions. The word *ἄσχυ* in particular, belonging as it does to the 'domestic' class, may itself be pre-Turkic in origin, taken over with other things by the Turkic invader.¹

The house-type of the Argippaei agrees more or less in detail with that generally in use among all Turkic tribes in Turkestan, though a more

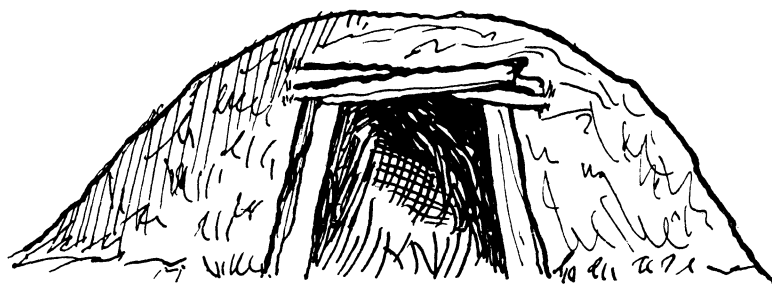


FIG. 2.—TATAR HUT TYPE IN THE MUGAN STEPPE.

exact parallel survives in the Caucasus in the steppe country between Tiflis and Baku (see Figs. 2, 3). It may have found its way westwards to the Caucasus, owing to the pressure from the East of Turkic invaders.

On the assumption, then, that the route given us by Herodotus has curved right round to the South-east, and that, as far as its detailed description is based on the observation of travellers and merchants, it ends in the land of the Argippaei in Western Turkestan, we can now approach the vaguer regions beyond the Turkomans. Beyond the Argippaei lies country of which no one can give any account, and about which Herodotus has only heard stories that are little more than tribal legends and lack the authenticity of traders' reports. He dismisses most of these tales in the same critical spirit in which he summarised the

¹ If the derivation of the name Oxus from the Turkic word *Aksu* is correct, we may have an example of a pre-Greek Turkic word.

value of the descriptions of Aristaeas. All he states as fact is that immediately *to the East* of the Argippaei come the Issedones. Since he has already said that beyond the Argippaei further progress is barred by lofty and impassable mountains it is clear that the Issedones can hardly be the other side of this barrier, which he has told us shuts off a region about which no one can give any account.

If then the Argippaei are to be placed somewhere on the foothills of the mountains on the North of Persia and Afghanistan, the Issedones,

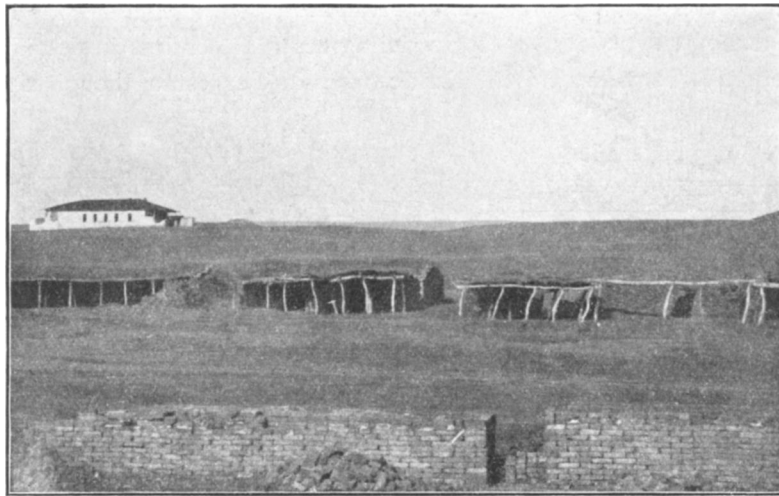


FIG. 3.—TATAR HUTS IN THE MUGAN STEPPE BETWEEN TIFLIS AND BAKU.

being to the East of the former tribe, would be somewhere along the Upper Oxus valley between Merv and Balkh, a district rich in pre-historic sites. This allocation is strengthened by another passage in Herodotus¹ where he says that the Massagetae dwell beyond the river Araxes and opposite to the Issedones. The Araxes thus would indisputably be the Oxus and the Massagetae would live near Kizilkum in the fertile regions of Bokhara and Khiva, 'opposite' here meaning 'on the opposite side of the plains,' *i.e.* to the North-east.² The impassable mountain barrier behind both the Argippaei and the Issedones, as shown

¹ i. 201. οἰκημένον δὲ πρὸς ἡῶ τε καὶ ἡλίου ἀνατολάς, πέραν τοῦ Ἀράξω ποταμοῦ, ἀντίον δὲ Ἰσσηδόνων ἀνδρῶν.

² Minns, for no very clear reason, interprets 'opposite' as 'to the West.'

above, would be the mountains that shut off Meshed, Herat and Kabul from the plains of Turkestan. The 'unknown tract' which lies to the North may well be the broken country North and North-west of Kizilkum, *i.e.* beyond the Massagetae and between Aral and Balkash; so Herodotus appears at last, after repeatedly correcting his orientation, to have got his direction approximately correct. The fact that Croesus advised Cyrus to cross the Araxes and fight the Massagetae in their own land agrees with the allocation of this tribe across the Oxus.

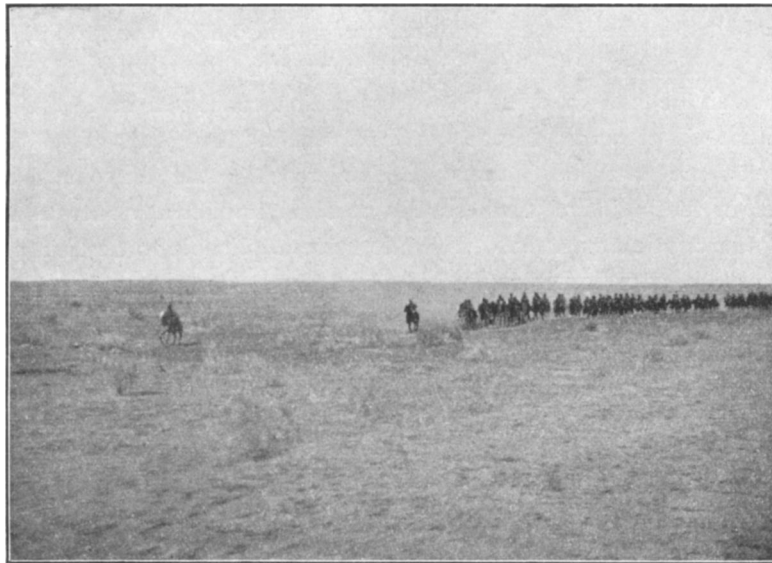


FIG. 4.—HORSEMEN IN THE DESERT (NEAR MERV) EAST OF THE CASPIAN.

Beyond the Issedones came the Arimaspi and the Hyperborei about whom the less said the better. Herodotus frankly warns his readers that he has already entered into the realm of folk-lore and left that of anthropology.¹ They may be imagined as anywhere in the Altai or Pamir regions. The name, at least, seems to have survived in the

¹ It is curious that in Bk. iii. 17 the description of the river Akes, which is somewhere near the Caspian, comes immediately after an account of the Arimaspi. Information about both has every appearance of being derived from folk stories, and it is tempting to think that Herodotus had the Arimaspi entered up in his notebooks under the heading 'Notes from Transcaspia.'

Ἀριάσπαι Εὐεργέται who helped Alexander, and who certainly lived on the West side of the Pamir barrier.¹

The climate of the whole of the area from Azov to the Argippaei is summed up in Herodotus when he says that it is subject to severe winter ; the sea² and the Cimmerian Bosphorus alike are frozen over.

A word of comment seems necessary here. The whole region dealt with is subject to a variety of climates and it would be unwise in any case to generalise. But in case the objection is raised to the inclusion of western Turkestan in this summary, it should be remembered that most intense cold prevails in the Karakum and Kizilkum deserts in winter and that even in the lowest parts the snow is seldom off the ground before the middle of March.³ Herodotus, however, is influenced by the information which he had in most detail, and which concerned more the North end of the Caspian and North Caucasia where the rigours of winter are more extreme than in Turkestan. Nevertheless the extreme heat in summer in the plains of Turkestan in no sense implies a moderate winter, and the description of Herodotus, while more applicable to Scythia proper, is in no sense inapplicable to Turkestan.

The result of the above analysis, therefore, is to bring within a smaller compass the areas occupied by these tribes. In view of the difficulty with which information could reach Herodotus and of the small areas usually covered by information derived from folk-memory, this seems not unreasonable. To give vast areas to tribes seems to accord ill with tribal conditions. According to recent critics,⁴ the Issedones alone are given a territory as large as the extent of Asia between the Aegaeon and the Caspian and are placed East of the Pamir ridge. It seems better to look closer to hand for their home.

In conclusion it may be useful to summarise the views here put forward :—

The theory of a united Aralo-Caspian Sea in the time of Herodotus and for some considerable time afterwards is based on sound geological grounds and goes far to explain the curious silence of antiquity in regard

¹ Arrian, *Anabasis*, iii. 27, 4.

² Presumably the Euxine, though it is curious that he calls it simply ἡ θάλασσα (iv. 28).

³ I saw snow about this time on the lower hills of Kopet Dag, and the plains were in places still covered with pools of water.

⁴ *E.g.* Minns, *op. cit.* (see maps). He identifies the Issedones with the Yüeh Chih on the Tarim river.

to Aral, it also explains many of the traditional difficulties in regard to the Caspian. At the same time, it reduces the sharpness of the antithesis according to which the flow of the Oxus was into either Aral or Caspian. The actual change of the Oxus itself thus becomes a problem of less importance to history.

The fixing of one of the extra-Scythian tribes at the head of the Caspian, makes possible a revised grouping of other tribes. The real, as opposed to the imagined, direction of flow of the Don together with the half-realisation of Herodotus himself that something was wrong, still further strengthens this regrouping. This, in turn, leads to a possible identification of the lands of the Argippaei with Western Turkestan along the marches of Persia and Afghanistan, and of the lands of the Issedones with the plains West of the Altai and Pamir.

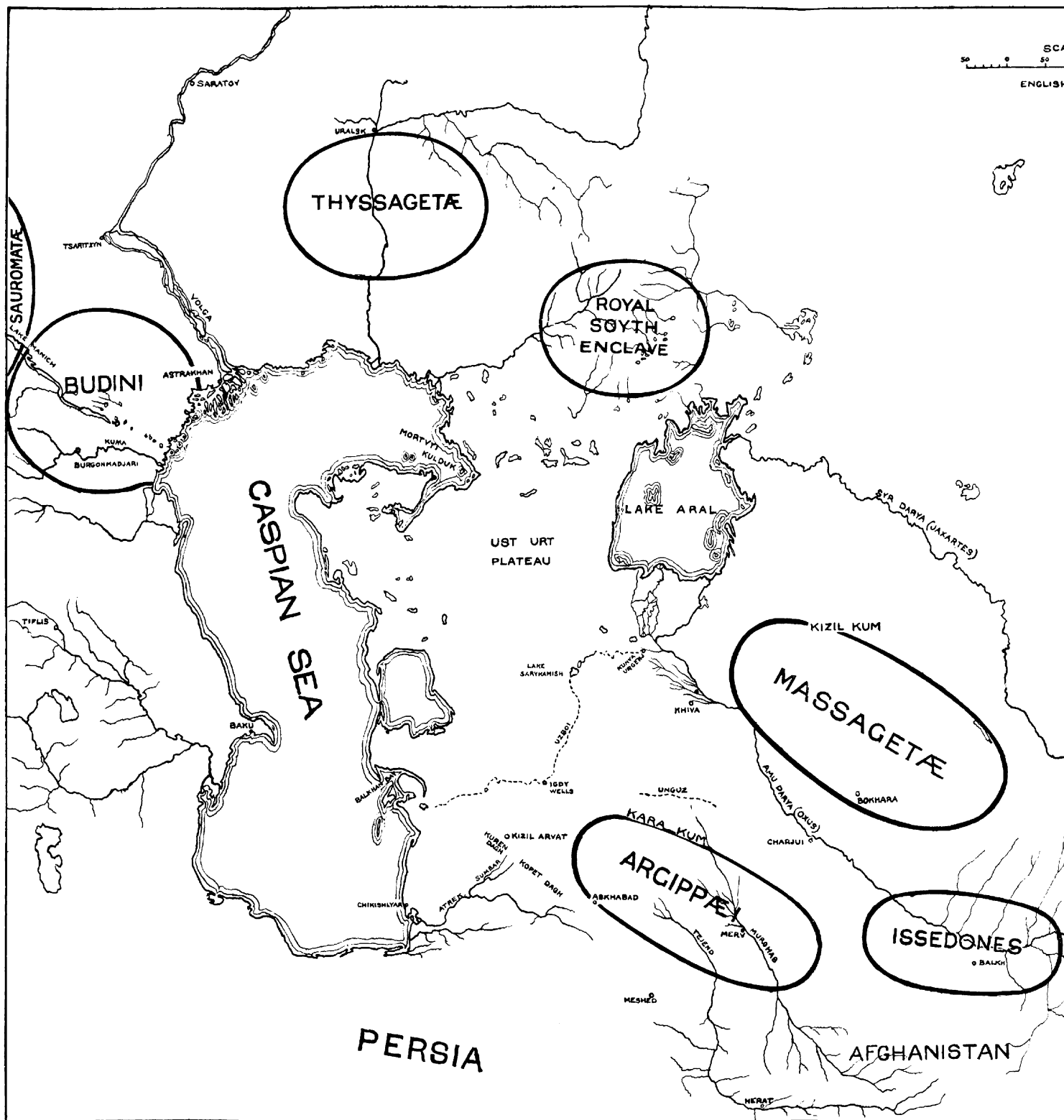
The value of the travellers' and traders' tales used by Herodotus increases as a result of these points and the only weakness in what is otherwise a remarkably accurate account of the Caspian region, is seen to be the inability to interpret and correlate all the isolated scraps of evidence the historian had collected.

In view of the accuracy of Herodotus it is all the more remarkable that little more than a century later his information was disregarded. Alexander, ignorant of or distrusting the evidence of the historian, sent an expedition to ascertain whether the Caspian joined the Euxine.¹ The great general's ignorance of geography is not surprising when we find him later confusing the Indus with the Nile.² The study of geography which had started so well in the fifth century had become sadly neglected in the fourth.

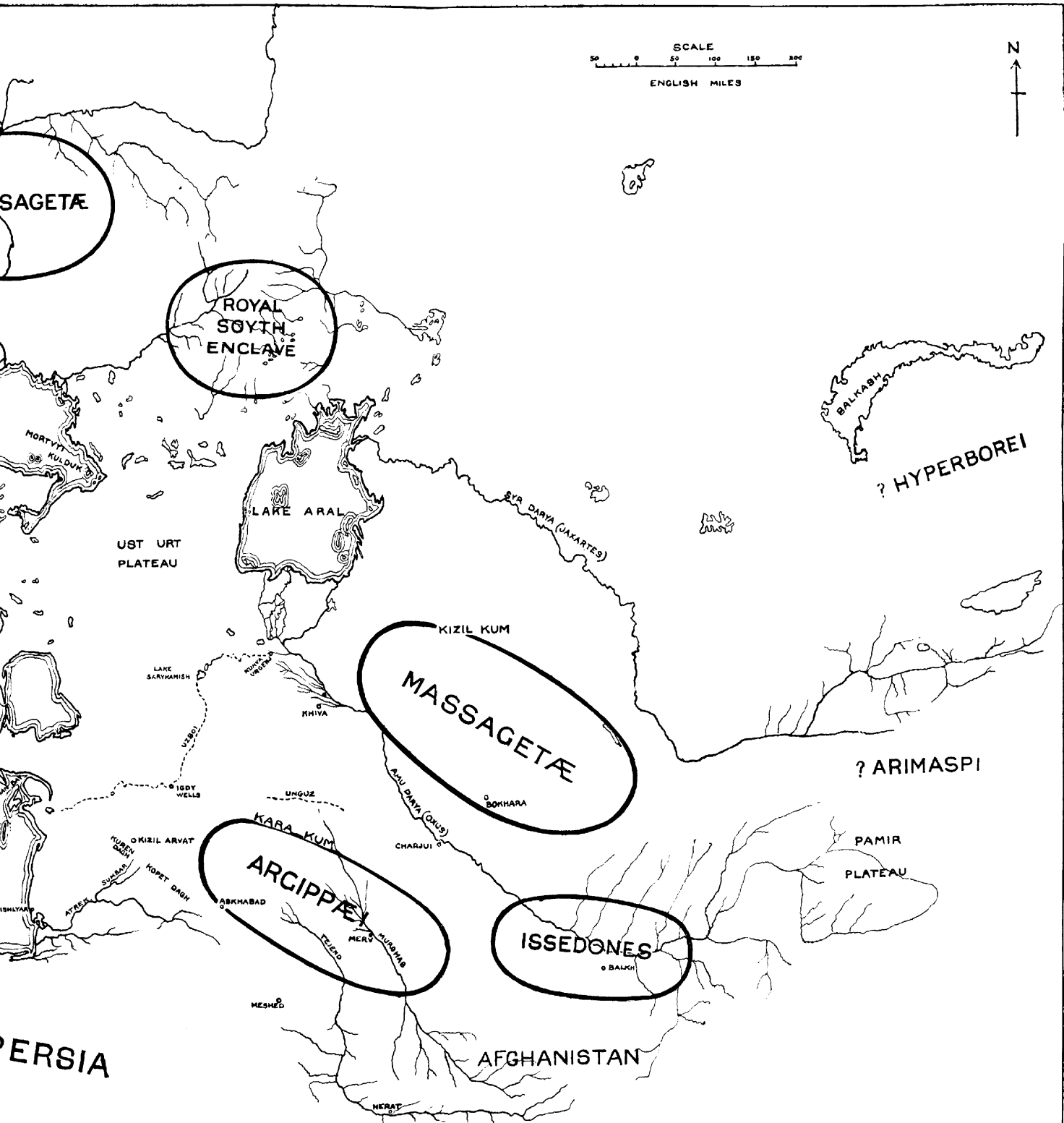
STANLEY CASSON.

¹ Arrian, *op. cit.* vii. 16, 1.

² *Ibid.* vi. 1. 2.



HERODOTUS AND THE CASPIAN: SKETCH MAP TO ILLUSTRATE TOPOGRAPHICAL AND ETHNOLOGICAL PRO



SCYTHIA AND THE CASPIAN: SKETCH MAP TO ILLUSTRATE TOPOGRAPHICAL AND ETHNOLOGICAL PROBLEMS.